

CLAIMS

WHAT IS CLAIMED IS:

1. A vehicle door latch control system, comprising:

a latch mechanism motor;

a bus;

at least one occupant-operable regulator;

a door controller connected to the latch mechanism motor, the bus and said at least one regulator, the door controller containing door controller logic that detects a fault in the bus and that assigns control of the latch mechanism motor to one of said regulators upon detection of the fault.

2. The system of claim 1, wherein the door controller logic operates the latch mechanism motor to a security locking state when the door controller detects actuation of the regulator.

3. The system of claim 1, wherein the door controller logic operates the latch mechanism motor to a latch release state when the door controller detects actuation of the regulator.

4. The system of claim 1, wherein said at least one occupant-operable regulator is at least one selected from the group consisting of an inside door regulator, a central locking regulator, and a window lifter regulator.

5. The system of claim 4, wherein said at least one occupant-operable regulator is the inside door regulator, and wherein the system further comprises an inside door regulator contact, wherein the door controller logic operates the latch mechanism motor when the fault is detected in the bus and when the inside door regulator contact indicates that the inside door regulator is actuated.

6. The system of claim 1, wherein the bus is a multiplexed bus.

7. The system of claim 1, further comprising a door closing contact, wherein the door controller logic operates the latch mechanism motor when a fault is detected in the bus and when the door closing contact indicates that the vehicle door is closed.

8. A door controller for a vehicle door, comprising:
 - a first terminal to connect the door controller to a bus;
 - a second terminal to connect the door controller to a latch mechanism motor;
 - at least one regulator terminal to connect the door controller to at least one occupant-operable regulator;
 - detection logic that detects a fault in a bus connected to the bus connection terminal; and
 - security locking logic that detects operation of at least one occupant-operable regulator and issues a security locking command to the latch mechanism motor to perform security locking of a door latch mechanism if the detection logic detects the fault in the bus.

9. A method for controlling a vehicle door latch system mechanism having a latch mechanism, a bus, and at least one occupant-operable regulator, the method comprising:

detecting a fault in the bus;
assigning control of the latch mechanism to one of said regulators upon detection of the fault; and
operating the latch mechanism when the regulator is actuated.

10. The method of claim 9, wherein the operating step comprises security locking the latch mechanism.

11. The method of claim 9, wherein the operating step comprises releasing the latch mechanism.

12. The method of claim 9, further comprising detecting actuation of an inside door regulator, wherein the operating step is conducted when the fault is detected in the bus and when the actuation of the inside door regulator is detected.

13. The method of claim 9, further comprising detecting a closed door, wherein the door controller logic operates the latch mechanism motor when a fault is detected in the bus and when the closed door is detected.

14. The method of claim 9, in which the regulator is a window lifter regulator, and wherein the latch mechanism operating step is performed if the window lifter regulator is actuated.

15. The method of claim 9, in which the regulator is an inside door opening regulator, and wherein the latch mechanism operating step is performed if the inside door opening regulator is actuated.